Nautica 4000 Installation Guide

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Bay Networks

Bay Networks

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USA Requirements Only

Federal Communications Commission (FCC) Compliance Notice: Radio Frequency Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Battery Disposal

When disposing of the lithium battery module, this must be done in accordance with the manufacturer's disposal instructions.

European Requirements Only

EN 55 022 Statement

This is to certify that the Bay Networks Nautica 4000 is shielded against the generation of radio interference in accordance with the application of Council Directive 89/336/EEC, Article 4a. Conformity is declared by the application of EN 55 022 Class B (CISPR 22).

EC Declaration of Conformity

This product conforms (or these products conform) to the provisions of Council Directive 89/336/EEC and 73/23/EEC. The Declaration of Conformity is available on the Bay Networks World Wide Web site at www.baynetworks.com.

Power Supply

Power is provided via a standard IEC 320 (CEE-22) connector through an inlet on the rear of the unit.

A single power cable, 2 metres in length, is supplied with the unit. This should be connected to a suitable power supply. The power connector is the primary disconnect device for the unit and you must ensure that the unit is installed near a power outlet and that the outlet is accessible.

The power cable supplied with the unit is fitted with a moulded connector for connection to the standard socket outlet. The use of adaptors is not recommended and may invalidate the product's approval. The wires in the power cable are coloured in accordance with the following code:

Green and Yellow	Earth
Blue	Neutral
Brown	Live

L'alimentation secteur est fournie par un connecteur standard IEC 320 (CEE-22) au travers d'une prise située à l'arrière de l'unité.

A cable d'alimentation secteur de 2 mètres est fourni avec l'unité. Celui-ci devra être connecté à une alimentation secteur. La prise secteur est le moyen primaire de déconnection de l'unité et vous devez donc vous assurer qu'elle est installée près d'une prise et que cette prise est accessible.

Le cordon secteur fourni avec l'unité possède un connecteur moulé pour la connection à une prise de secteur standard. L'utilisation adapteurs n'est pas recommandée et peut invalider l'homoligation du produit.

Les cables dans le cordon fourni sont colorisés selon les codes suivantes:

Vert et Jaune	Terre
Bleu	Neutre
Marron	Phase

The "in-wall" power cable supplied with the Nautica 4000 must be used to ensure continued compliance with the applicable regulations. Should a replacement power module be required, this must be obtained from Bay Networks Inc.

Battery Disposal

When disposing of the lithium battery module, this must be done in accordance with the manufacturer's disposal instructions.

Port Specifications

The Nautica 4000 has ports, which are classified as follows:

Port	Type	Location
LAN 10BASE-T	SELV	Chassis
LAN AUI	SELV	Chassis
Manager	SELV	Chassis
BRI	TNV	Chassis
PRI	TNV	Chassis
WAN	TNV (within the limits of SELV)	Chassis
ISDN (J2)	TNV	BRI-ST Module
Host (J1)	SELV	BRI-ST Module

Interconnection circuits should be such that the equipment continues to comply with the requirement of section 6.2 for Telecommunications Network Voltage (TNV) circuits and section 2.3 for Safety Extra Low Voltage (SELV) circuits of EN 60950:1992/A4:1997 after making connections between circuits.

Swedish Requirements Only

Denna produkt och expansionkort är avsedda för fackmannamässig installation i Sverige.

När service utförs på utrustningen, var vänlig koppla ur nätverket (inklusive ISDN-nätet) först, innan kontakten dras ur.

Japan/Nippon Requirements Only

Voluntary Control Council for Interference (VCCI) Statement

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Voluntary Control Council for Interference (VCCI) Statement

This is a Class B product based on the standard of the Voluntary Control Council for Interference from Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

Canada Requirements Only

Canadian Department of Communications Radio Interference Regulations

This digital apparatus (Nautica 4000) does not exceed the Class B limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Règlement sur le brouillage radioélectrique du ministère des Communications

Cet appareil numérique (Nautica 4000) respecte les limites de bruits radioélectriques visant les appareils numériques de classe B prescrites dans le Règlement sur le brouillage radioélectrique du ministère des Communications du Canada.

Canada CS-03 Rules and Regulations

Notice: The Industry Canada label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent the degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

Notice: For equipment using loopstart lines, please note that the Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5. The REN is located on the "FCC Rules Part 68" label located on the bracket of the module, or on the back of the unit.

Canada CS-03 -- Règles et règlements

Avis: L'étiquette d'Industrie Canada identifie le matériel homologué. Cette étiquette certifie que le matériel est conforme aux normes de protection, d'exploitation et de sécurité des réseaux de télécommunications, comme le prescrivent les documents concernant les

exigences techniques relatives au matériel terminal. Le Ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'entreprise locale de télécommunication. Le matériel doit également être installé en suivant une méthode acceptée de raccordement. L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêche pas la dégradation du service dans certaines situations.

Les réparations de matériel homologué doivent être coordonnées par un représentant désigné par le fournisseur. L'entreprise de télécommunications peut demander à l'utilisateur de débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise à la terre de la source d'énergie électrique, des lignes téléphoniques et des canalisations d'eau métalliques, s'il y en a, sont raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.

Avertissement: L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours à un service d'inspection des installations électriques, ou à un électricien, selon le cas.

Avis: Veuillez prendre note que pour tout appareillage supportant des lignes de type “loopstart,” l'indice d'équivalence de la sonnerie (IES) assigné à chaque dispositif terminal indique le nombre maximal de terminaux qui peuvent être raccordés à une interface. La terminaison d'une interface téléphonique peut consister en une combinaison de quelques dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5. Le REN figure sur l’étiquette “FCC Rules Part 68” située sur le support du module ou à l’arrière de l’unité.

FCC Part 68 Compliance Statement

This equipment complies with Part 68 of FCC Rules. All direct connections to telephone network lines must be made using standard plugs and jacks compliant with FCC Part 68. Please note the following:

1. You are required to request service from the telephone company before you connect the unit to a network. When you request service, you must provide the telephone company with the following data:
    - When you request T1 Service, you must provide the telephone company with
        -- The Facility Interface Code

            Provide the telephone company with all the codes below:

            - 04DU9-BN (1.544 MB, D4 framing format)
            - 04DU9-DN (1.544 MB, D4 framing format with B8ZF coding)
            - 04DU9-1KN (1.544 MB, ESF framing format)
            - 04DU9-1SN (1.544 MB, ESF framing format with B8ZF coding)
            - 04DU9-1ZN (1.544 MB, ANSI ESF and ZBTSI without line power)

            The telephone company will select the code it has available.

        -- The Service Order Code(s) (SOC): 6.0Y

-- The required Universal Service Order Code (USOC) jack: RJ48C

- When you request ISDN "U" Interface Service, you must provide the telephone company with
  - -- The Facility Interface Code: 02IS5
  - -- The Service Order Code(s) (SOC): 6.0F
  - -- The required Universal Service Order Code (USOC) jack: RJ49C
- When you request ISDN "S/T" Interface Service, you must provide the telephone company with
  - -- The Service Order Code(s) (SOC): 6.0P
  - -- The make, model number, and FCC Registration number of the NT1

  Note: ISDN S/T cannot be directly connected to the network.
- When you request Primary Rate ISDN Service, you must provide the telephone company with
  - -- The Facility Interface Code: 04DU9-1SN (1.544 MB, ESF framing format with B8ZF coding)
  - -- The Service Order Code(s) (SOC): 6.0Y
  - -- The required Universal Service Order Code (USOC) jack: RJ48C

2. Your telephone company may make changes to its facilities, equipment, operations, or procedures that could affect the proper functioning of your equipment. The telephone company will notify you in advance of such changes to give you an opportunity to maintain uninterrupted telephone service.
3. If the unit causes harm to the telephone network, the telephone company may temporarily discontinue your service. If possible, they will notify you in advance, but if advance notice is not practical, you will be notified as soon as possible and will be informed of your right to file a complaint with the FCC.
4. If you experience trouble with the unit, please contact the Bay Networks Technical Solutions Center in your area for service or repairs. Repairs should be performed only by service personnel authorized by Bay Networks, Inc.

United States	1-800-2LAN-WAN
Valbonne, France	33-4-92-96-69-68
Sydney, Australia	61-2-9927-8800
Tokyo, Japan	81-3-5402-0180

5. You are required to notify the telephone company when you disconnect the unit from the network.

Module Installation Warning

The power required by the host and the total of adaptor cards installed within the host environment, together with any auxiliary apparatus, shall not exceed the power specifications of the host apparatus.

It is essential that when other option cards are introduced which use or generate a hazardous voltage, the minimum creepages and clearances specified in Table 1 are maintained. Suitable user protection to ensure compliance with EN 60950 should be present on the card. A hazardous voltage is one which exceeds 42.4 V peak AC or 60 V DC. If you have any doubt, seek advice from a competent engineer before installing other adaptors into the host equipment.

The equipment must be installed such that, with the exception of the connections to the host, clearance and creepage distances shown in Table 1 are maintained between the card and any other assemblies which use or generate a voltage shown in the table below. The larger distance shown in parentheses applies where the local environment within the host is subject to conductive pollution or dry non-conductive pollution which could become conductive due to condesation. Failure to maintain these minimum distances would invalidate the approval.

Table 1. Creepage and Clearances

Clearance (mm)	Creepage (mm)	Voltage used or generated by Host or other cards.
2.0	2.4 (3.8)	Up to 50 V rms or V dc
2.6	3.0 (4.8)	Up to 125 V rms or V dc
4.0	5.0 (8.0)	Up to 250 V rms or V dc
4.0	6.4 (10.0)	Up to 300 V rms or V dc

For a host or other expansion card fitted in the host, using or generating voltages greater than 300 V (rms or dc), advice from a competent telecommunications safety engineer must be obtained before the installation of the relevant equipment.	Above 300 V rms or V dc

Figure 2. shows a physical representation of the creepage and clearances.

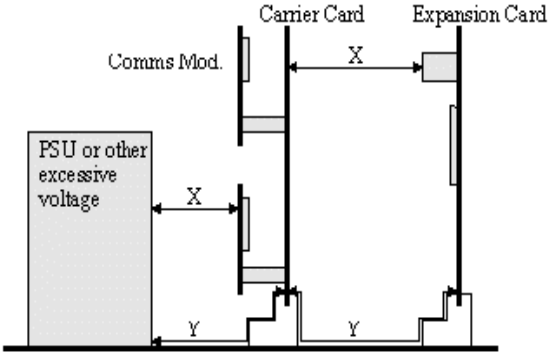

Figure 2. Creepage and Clearance

Except at the edge connectors, which plug into the host's expansion slot, clearance distance X (mm) and creepage distance Y (mm) as given in Table 1, must be maintained between the communications card and any other assemblies that use or generate a hazardous voltage.

ISDN Cards

The ISDN cable(s) must remain disconnected from the telecommunications system until the card has been installed within a host that provides the necessary protection of the operator.

If it is subsequently desired to open the host equipment for any reason, the ISDN cable(s) must be disconnected prior to effecting access to the ISDN communications card.

German Requirements Only

Stromversorgung

Der Strom wird über einen sereinmäßigen IEC 320 (CEE-22) Stecker durch eine Einlaßöffnung an der Rückseite des Gerätes zugeführt.

Ein einzelnes Stromkabel von 2m Länge wird mit dem Gerät geliefert. Dieses sollte an eine geeignete Stromversorgung angeschlossen werden. Der Stromstecker ist die Haupt-Ausschaltvorrichtung des Geräts, und Sie müssen sicherstellen, daß das Gerät in der Nähe einer Netxsteckdose montiert ist und daß diese erreichbar ist.

Das mit dem Gerät gelieferte Stromkabel ist mit einem geformten Stecker zum Anshluß an eine Standard-Steckdose ausgestattet. Die Verwendung von Adapteren wird nicht empfohlen und kann zur Außerkraftsetzung der Genehmigung des Gerätes führen. Die Drähte im Stromkabel haben unterschiedliche Farben in Übereinstimmung mit dem folgenden code:

Grün und Gelb	Erdung
Blau	Neutral
Braun	Stromführend

Entsorgung der Batterie

Die Entsorgung des Lithium-Batterie-Moduls muß unter Einhaltung der Entsorgungvorschriften des Herstellers erfolgen.

Portspezifikationen

Das Nautica 4000 Gerät hat wie folgt klassifizierte ports:

Port	Typ	Standort
LAN 10BASE-T	SELV	Chassis
LAN AUI	SELV	Chassis
Manager	SELV	Chassis
BRI	TNV	Chassis
PRI	TNV	Chassis
WAN	TNV (innerhalb der Grenzen von SELV)	Chassis
ISDN (J2)	TNV	BRIST-Modul
Host (J1)	SELV	BRIST-Modul

Die Verbindungsschaltungen sollten so beschaffen sein, daß sie weiterhin den Erfordernissen von Abschnitt 6.2 für Telecommunications Network Voltage (TNV) Schaltungen und Abschnitt 2.3 für Safety Extra Low Voltage (SELV) Schaltungen der bestimmungen EN60950:1992/A4:1997 entsprechen, nachdem die Verbindung zwischen den Schaltungen hergestellt wurde.

Warnung für die Installation des Moduls

Der Strom, welcher vom Host und allen in der Hostumgebung installierten Adapterkarten benötigt wird, darf nicht die Stromspezifikationen für das Hostgeät überschrieten (siehe S.3).

Es ist wichtig, daß auch bei Einführung anderer optionskarten, die eine gefährliche spannung benutzen oder erzeugen, der in tabelle 1 angegebene mindestkriechstrom und die mindestspielräume aufrechterhalten werden. Ein geeigenter benutzerschutz in Übererinstimmung mit EN 60950 sollte auf der karte vorhanden sein. Eine gefährliche spannung ist bei 42,4V spitzenleistung AC oder 60V DC gegeben. Wenn Sie im zweifel sind, lassen Sie sich vor der installation anderer adapter in das Hostgerät von einem erfahrenen Techniker beraten.

Das gerät muß so installiert sein, daß die in Tabelle 1 aufgeführten spielraum und kriechstromentfernungen zwischen den karten und anderen baugruppen, die eine in der untestehenden Tabelle angegebene spannung benutzen oder erzeugen, aufrechterhalten bleiben. Die in klammern angegebene größere entfernung gilt, wo die örtliche umgebung im Host leitfähiger verschmutzung bzw. trockener nichtleiender verschmutzung ausgesetzt ist, welcher aufgrund von kondensation leitfähig werden kann. Das nichteinhalten dieser Mindestentfernungen kann zur Außerkraftsetzung der genehmigung des gerätes führen.

Kriechstrom	**Spielräume**	**Vom Host oder anderen karten benutzte oder erzeugte Spannung**
2.0	2.4 (3.8)	Bis zu 50 V Effektivstrom oder V DC
2.6	3.0 (4.8)	Bis zu 125 V Effektivstrom oder V DC
4.0	5.0 (8.0)	Bis zu 250 V Effektivstrom oder V DC
4.0	6.4 (10.0)	Bis zu 300 V Effektivstrom oder V DC
Bei einbau eines hosts oder einer anderen erweiterungskarte, die größere spannungen als 300 V (Effektivstrom oder DC) benutzen oder erzeugen, muß vorher Rat von einem kompetenten Telekommunikations-Sicherheitstechniker eingolt werden.		Über 300 V Effektivstrom oder DC

Abbildung 2 seigt die physikalische darstellung von kriechstrom und spielräumen.

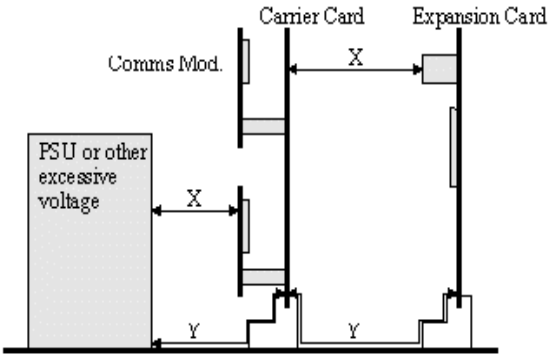

Abbildung 4. Kriechstrom und Spielräume

Ausgenommen an den randstiftleisen, die in den erweiterungsschlitz des hosts gesteckt werden, muß spielraumentfernung X (mm) und Kriechstromentfernung Y (mm) gemäß Tabelle 1 zwischen den kommunikationskarten und allen anderen baugruppen, die gefährliche spannung benutzen oder erzeugen, aufrechthalten werden.

ISDN-Karten

Das ISDN-Kabel darf nicht an das telekommunikationssystem angeschlossen werden, bevor die karte in einem host installiert wurde, der den notwendigen schutz für den benutzer bietet.

Sollte das hostgerät zu einem späteren zeitpunkt aus irgendeinem grund geöffnet werden müssen, muß das ISDN-Kabel entfernt werden, bevor zugang zur ISDN-Kommunikationskarte möglich ist.

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Nautica 4000 Installation Guide

The Nautica™ 4000 network access concentrator provides a high concentration of WAN access across multiple WAN interfaces. Option slots are available for BRI Leased Line modules, PRI modules and Synchronous Frame Relay modules.

For information about the additional modules that can be purchased for the Nautica 4000, refer to the “Nautica Module Installation Guide” that comes with any additional modules you purchase.

For basic configuration of the Nautica 4000, use Nautica Wizard. Experienced users can troubleshoot the Nautica 4000 using the BCC command line interface, which is available using Telnet, a VT terminal, or, terminal emulation package such as Microsoft HyperTerminal. To use the command line interface, connect to the Manager port using the manager cable provided.

This guide contains the following sections:

- “Checklist” (page -2)
- “Site Preparation” (page -3)
- “ISDN Ordering Information” (page -4)
- “WAN Ordering Information” (page -5)
- “Connecting the Cables” (page -6)
- “Nautica 4000 Front Panel Display” (page -8)
- “Requirements for the PC Applications” (page -9)
- “Installing the PC Applications” (page -10)

Checklist

Before you begin the installation, make sure that your Nautica 4000 package includes the following items:

- The Nautica 4000 router
- One power cable with the correct power connector
- Four black ISDN cables labelled 119071, one for each ISDN connection
- One Installation CD labelled 119777
- One Manager cable labelled 117239
- One gray Ethernet local area network (LAN) cable labelled 118138
- Four black RJ-45 to RJ-11 ISDN cables labelled 119068 (North America only), one for each ISDN connection

If any items are missing, please contact the supplier of your Nautica 4000.

Site Preparation

You should install the Nautica 4000 on a flat surface, in a clean, dry location with no extreme temperatures. Make sure that all of the required services (power, LAN access and ISDN) are available and working correctly.

Table 1 lists the operating requirements for correct installation of the Nautica 4000.

Table 1. Operating Requirements

Parameter	Specification
Power supply	85 to 264 VAC, 47 to 440 Hz
Power supply current	350 mA maximum @ 230 VAC 730 mA maximum @ 110 VAC
Power consumption	80 W maximum
Operating temperature	5^{o} to 30^{o}C (41^{o} to 86^{o}F)
Humidity	5% to 95% (noncondensing)
LAN cable	100 m maximum Cat 3 or 5

Make sure that there is sufficient space on all sides of the Nautica 4000 so that it does not exceed the maximum temperature.

ISDN Ordering Information

This section describes the ordering information you need if you plan to use ISDN to connect your Nautica 4000 to other devices.

European ISDN Information

If you require ISDN in Europe, do the following:

- If you require calling line identification (CLI) for additional security, order the CLI option from your ISDN service provider.
- If possible, order **all** B channels with the **same** ISDN number. This is known as *auxiliary working* and can speed up connection times, particularly if you are using all ISDN channels.

To configure ISDN, refer to the relevant ISDN chapters in the online documentation on the installation CD.

North American ISDN Information

If you require ISDN in North America, do the following:

- Ensure that each ISDN line is configured in national ISDN mode or in the manufacturer's custom mode.
- Find out if your ISDN interfaces are point-to-point or multipoint as this affects the way the ISDN interface is configured.
- Ensure that you have the same switch type configured as your ISDN service provider's central office. If you are unsure of the switch type, check with your ISDN service provider.
- Ensure that you are informed of the local directory numbers assigned to the lines by your ISDN service provider.
- Ensure that you are informed of the Service Profile Identifiers (SPIDs) for the local directory numbers, also assigned by your ISDN service provider.

For further information about ordering Basic Rate ISDN, refer to the online document “Ordering Basic Rate ISDN” at http://www.baynetworks.com.

To configure ISDN, refer to the relevant ISDN chapters in the online documentation on the installation CD.

WAN Ordering Information

If your Nautica 4000 has a WAN port, connection to a remote unit can be made via a permanent leased circuit.

European WAN Information

- Most European public network digital leased circuit services are provided with an X.21/V.11 Network Terminating Unit (NTU) by the service supplier. This can be directly connected to the Nautica 4000 with the WAN cable provided.
- If the leased circuit is supplied without an NTU, one must be provided before connection to the Nautica 4000.
- The WAN interface on the Nautica 4000 can be supplied as standard with X.21/V.11, V.35/V.10, or V.24/V.28 using the relevant CLAM WAN Module (C-WAN).
- Ensure that your Nautica 4000 is fitted with the correct interface for the terminating unit supplied.

North American WAN Information

- Leased circuit services in North America are not normally provided with line terminating equipment. A Channel Service Unit/Data Service Unit (CSU/DSU) must be obtained to connect the line and the Nautica 4000.
- Ensure that your Nautica 4000 is fitted with the correct interface for the terminating unit supplied (V.35/V.10 is standard).

Connecting the Cables

Figure 1 shows the Nautica 4000 with four or eight ISDN ports. Each numbered item is described on page -7.

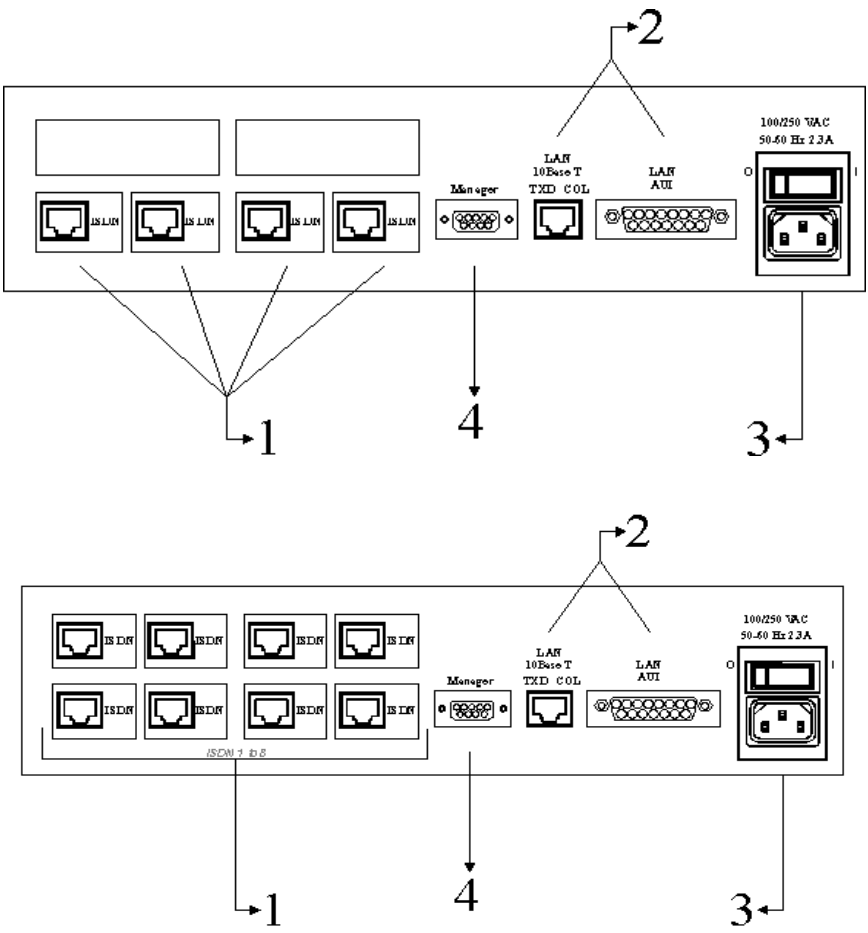

Figure 1 Nautica 4000 with Four or Eight ISDN Ports

Connect the cables to the Nautica 4000 in the following sequence:

1. **Connect one end of the black ISDN cable (labelled 119071) to one of the ISDN ports on the back of the Nautica 4000. Connect the other end of the cable to the ISDN wall outlet. Repeat this process for each ISDN connection.**

   In North America, if you are using the RJ-45 to RJ-11 ISDN cables (labelled 119068), connect the RJ-45 end of the cable to the back of the Nautica 4000. Connect the RJ-11 end of the cable to the ISDN wall outlet. Repeat this process for each ISDN connection.

2. **Connect one end of the Ethernet cable (labelled 118138) to the back of the Nautica 4000 and connect the other end to your hub. Or, connect your transceiver or transceiver drop cable (not supplied) to the LAN AUI port on the back of the Nautica 4000 and connect the other end to your Ethernet connector.**

3. **Connect the power cable to the port on the back of the Nautica 4000. Turn the Nautica 4000 on by using the on/off switch on the back of the unit.**

Danger: Disconnect all ISDN cables from the wall outlets before connecting them to, or disconnecting them from, the Nautica 4000.

4. **The Manager port is used for diagnostics only. The Manager cable is labelled 117239. Connect this cable only if you are an experienced user of Nautica products and you want to start a Telnet or HyperTerminal session with the Bay Command Console (BCC™).**

Nautica 4000 Front Panel Display

The front panel of the Nautica 4000 contains a liquid crystal display (LCD). The LCD becomes active after the unit is turned on.

The LCD consists of 80 characters configured in two rows of 40 characters and three control buttons. Two of the buttons are labelled *Select* (up and down) and one button is labelled *Enter.*

You use the buttons to navigate the display, which enables you to view statistical information and obtain diagnostic data.

Figure 2 shows the messages that appear on the front panel display during the normal power-up sequence.

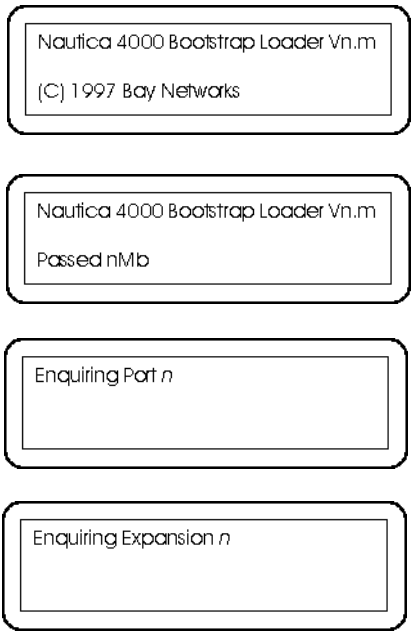

Figure 2. Front Panel Display Power-Up Sequence

Vn.m is the Loader version number, Passed *nMb* appears when the test is complete. *n* is the amount of RAM installed.

"Enquiring Port *n*" appears as the Nautica 4000 detects all the ports it needs to use. A number from 1 to 8 appears here as the ports are found.

"Enquiring Expansion *n*" appears as the Nautica 4000 detects the expansion ports in use. A number from 1 to 2 appears here as the ports are discovered.

At this stage, the Nautica 4000 starts loading its operational software. After the software has initialized, the display cycles between the system details and the status of all configured devices.

Requirements for the PC Applications

Before installing the PC applications Nautica Wizard, Nautica Manager and Nautica Watch, ensure that your PC meets the following minimum requirements:

- 486 33 MHz or higher IBM compatible PC running Microsoft Windows 95 or Windows NT 4.0.
- 2x CD-ROM drive (if installing software from the supplied CD.
- 256-color VGA display (640 by 480). An SVGA display (800 by 600) is required for advanced options.

Note: If your PC does not meet any of these requirements, the Nautica 4000 can still be configured using a Telnet connection using the Manager port on the back of the unit.

Installing the PC Applications

After you connect the cables and turn on the Nautica 4000, load the Nautica 4000 configuration software onto your PC as follows:

1. **Insert the CD that came with the Nautica 4000 package into your CD-ROM drive.**
2. **If auto-start is enabled on your PC, the setup program starts automatically.**
3. **If the setup program does not start automatically, start Windows Explorer, change to the CD-ROM drive, then double-click on the program file labelled *setup.exe*.**
4. **First time users should place the icons for Nautica Wizard, Nautica Manager and Nautica Watch on the desktop for easy access in the future.**
5. **The software is loaded onto your PC and the Installation Assistant starts, allowing you to configure the Nautica 4000 using a Windows interface.**
6. **If the Installation Assistant does not start automatically, double-click on the Nautica Wizard icon. When Nautica Wizard starts, click on the Nautica 4000 icon in the Wizard window, then click on the Configure button at the bottom of the Wizard window.**

For more information about the software included on the CD, refer to the online Help and the online documentation.

Note: You need Adobe Acrobat 3.0 in order to read the online documentation. You can install Adobe Acrobat from the CD.